

### **Amendments to the Claims:**

This listing of the claims will replace all prior versions, and listings, of claims in the application:

### **Listing of Claims:**

- 1-23. (canceled)
24. (currently amended) A method of manufacturing a tissue matrix comprising seeding stem cells from a mammalian placenta into or onto a tissue matrix, wherein said mammalian placenta has been treated to remove placental blood.
25. (previously presented) The method of claim 24, wherein said tissue matrix is an artificial tissue matrix.
26. (previously presented) The method of claim 24, wherein said tissue matrix is a tissue matrix produced from natural tissue.
27. (previously presented) The method of claim 26, wherein said natural tissue matrix is a decellularized tissue.
28. (previously presented) The method of claim 27, wherein said tissue is an organ or part of an organ.
29. (previously presented) The method of claim 24, wherein said stem cells are SSEA3<sup>-</sup>, SSEA4<sup>-</sup>, Oct-4<sup>+</sup> and ABC-p<sup>+</sup>.
30. (previously presented) The method of claim 29, wherein said stem cells are CD10<sup>+</sup>, CD29<sup>+</sup>, CD34<sup>-</sup>, CD44<sup>+</sup>, CD45<sup>-</sup>, CD54<sup>+</sup>, CD90<sup>+</sup>, SH2<sup>+</sup>, SH3<sup>+</sup>, or SH4<sup>+</sup>, or any combination of the foregoing.
31. (previously presented) The method of claim 24, wherein said stem cells are CD34<sup>+</sup>.
32. (previously presented) The method of claim 24, wherein said stem cells are obtained from a placenta has been perfused for at least 2 hours.
33. (previously presented) The method of claim 24, wherein said stem cells are obtained from a placenta has been perfused for at least 12 hours.
34. (previously presented) The method of claim 24, wherein said stem cells are obtained from a placenta has been perfused for at least 24 hours.
35. (previously presented) The method of claim 27, wherein said decellularized tissue is contacted with serum and fibronectin prior to said seeding.
36. (previously presented) The method of claim 35, wherein said decellularized tissue is additionally contacted with a glycosaminoglycan prior to said seeding.

37. (previously presented) The method of claim 36, wherein said glycosaminoglycan is heparin.

38. (previously presented) The method of claim 37, wherein said fibronectin and said heparin are present in a ratio of from about 0.1:1 to about 10:0.1 fibronectin:heparin.

39. (previously presented) The method of claim 24, wherein said stem cells are seeded by injection into said tissue.

40. (previously presented) The method of claim 24, wherein said stem cells are seeded through the tissue's vasculature.

41. (previously presented) A tissue matrix made according to the method of claim 25.

42. (previously presented) A tissue matrix made according to the method of claim 27.

43. (previously presented) A tissue matrix made according to the method of claim 38.